

REMARKS

Claims 1-14 are pending in the application, of which Claims 1, 11, and 14 are independent. In the Office Action, Claims 1-4, 6-8, and 10-14 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Japanese Patent Publication No. 2001-344788, invented by Hiroi Masaki (hereinafter "Masaki"). In addition, Claims 5 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Masaki in view of Japanese Patent Publication No. 09-050637, invented by Sugawara et al., (hereinafter "Sugawara").

Rejections Under 35 U.S.C. § 102(a)

In the Office Action, Claims 1-4, 6-8, and 10-14 are rejected under 35 U.S.C. § 102(a) as being anticipated by Masaki. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As discussed in detail below, applicant respectfully submits that Masaki does not teach each and every limitation of Claims 1, 11 and 14.

Masaki

Briefly, Masaki discloses an optical pickup adapted to tilt an objective lens about an axis in the tangential direction (X) and also about an axis in the tracking direction (Y). Referring to Drawings 1-3, an objective lens 1 is mounted to a lens holder 2. The lens holder 2 is attached to a fixed block 5 in a cantilever manner by a plurality of wires 4 extending from the fixed block 5 to the lens holder 2 in the tangential direction (X). The fixed block 5 is rotatably coupled to another carriage 6 by a shaft 7 oriented in the tangential direction (X) so that the lens holder 2 is rotatable about the centerline of the shaft 7.

Rotation of the lens holder 2 about the axis in the tangential direction (X) is controlled by a pair of tilt driving means 8a, 8b, which are mounted at one end to the carriage 6 and at the

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other end to the fixed block 5. The tilt driving means are positioned in the tangential direction (X) so that one tilt driving means is attached to one end of the lower surface of the fixed block 5, and the other tilt driving means is attached to the opposite end of the lower surface of the fixed block 5. The shaft 7 engages the fixed block 5 at a location between the tilt driving means 8a, 8b so that the fixed block 5 can be selectively rotated about an axis in the tangential direction (X) by actuating the tilt driving means 8a, 8b in opposing upward and downward directions. The tilt driving means 8a, 8b include a piezo-electric material 10, 10b and a flat spring 11a, 11b. The tilt driving means 8a, 8b are actuated by applying a voltage to the piezo-electric materials 10, 10b.

Claim 1

Claim 1 recites an electric lens drive that includes the following:

... a plurality of multilayer piezoelectric elements which laterally support said suspension holder,
wherein at least a first of said multilayer piezoelectric elements laterally supports a first side surface of said suspension holder and at least a second of said multilayer piezoelectric elements laterally supports a second side surface of said suspension holder opposite to said first side surface...

Thus, unlike Masaki, which teaches that tilt driving means 8a, 8b are located below the fixed block 5 and attached to the bottom end thereof (see e.g., Drawing 4), Claim 1 recites that the piezoelectric elements laterally support opposite side surfaces of the suspension holder, as shown in Figure 1. Because the piezoelectric elements of Claim 1 extend from the side surfaces of the suspension holder instead of the bottom surface, the claimed configuration enables adjustment of the optical axis of the objective lens 10 without increasing the thickness of the objective lens drive. In contrast, the optical pickup disclosed in Masaki has an increased thickness due to the location of the piezoelectric elements.

For at least the foregoing reasons, applicant respectfully submits that Masaki does not teach or suggest each and every element of Claim 1. Accordingly, applicant respectfully requests that the rejection of Claim 1 be withdrawn. If Claim 1 is allowed, then Claims 2-4, 6-8, and 10, which depend therefrom, should also be allowed.

Claim 11

As presently amended, Claim 11 recites an objective lens drive that includes the following:

... first and second piezoelectric elements which attach said suspension holder to a carriage, which are fixed at one end thereof to said carriage and which are provided so as to extend in the tracking direction, said first piezoelectric element attaching to a first side surface of said suspension holder and said second piezoelectric element attaching to a second side surface of said suspension holder opposite to said first side surface...

Thus, Claim 11 recites that the piezoelectric elements are attached to first and second side surfaces of the suspension holder. As previously discussed with regard to Claim 1, Masaki does not teach or suggest attaching the piezoelectric elements to side surfaces of the suspension holder. Instead, Masaki teaches that the piezoelectric elements are attached to the bottom thereof. Further, Claim 11 recites that the piezoelectric elements "extend in the tracking direction." In contrast, the piezoelectric elements of Masaki extend in a tangential direction.

For at least the foregoing reasons, applicant respectfully submits that Masaki does not teach or suggest each and every element of Claim 11. Accordingly, applicant respectfully requests that the rejection of Claim 11 be withdrawn. If Claim 11 is allowed, then Claims 12 and 13, which depend therefrom, should also be allowed.

Claim 14

Claim 14 recites an optical disc drive that includes the following:

... a plurality of multilayer piezoelectric elements which laterally support said suspension holder, at least a first of said multilayer piezoelectric elements laterally supporting a first side surface of said suspension holder and at least a second of said multilayer piezoelectric elements laterally supporting a second side surface of said suspension holder opposite to said first side surface to thereby make said suspension holder rotatable about an axis extending in a direction in which said suspension extends...

Thus, Claim 14 recites that the piezoelectric elements laterally support first and second side surfaces of the suspension holder, wherein the first and second side surfaces are opposite each other. This feature is neither taught nor suggested by Masaki, which instead teaches attaching the piezoelectric elements to a bottom surface of the suspension holder.

For at least the foregoing reasons, applicant respectfully submits that Masaki does not teach or suggest each and every element of Claim 14. Accordingly, applicant respectfully requests that the rejection of Claim 14 be withdrawn.

Rejections Under 35 U.S.C. § 103(a)

Claims 5 and 9, which depend from Claim 1, stand rejected as being unpatentable over Masaki in view of Sugawara. As stated in MPEP § 2142:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success.

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Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Sugawara teaches a skew adjustment device for an optical pickup wherein adjustment is accomplished using a piezoelectric element 26, which acts as an actuator. The piezoelectric element 26 is attached to a fixed block 21 that supports the lens holder 19. As shown in Drawing 8, the piezoelectric element 26 is attached to one side of the fixed part 21 and appears to pass through the fixed block. Drawing 14 shows an alternate embodiment wherein a first piezoelectric element 26 is attached to a bottom surface of the fixed part 21, and a second piezoelectric element 61 is attached to a bottom surface of the first piezoelectric element 26.

Nowhere in Sugawara does it teach or suggest that "at least a first of said multilayer piezoelectric elements laterally supports a first side surface of said suspension holder and at least a second of said multilayer piezoelectric elements laterally supports a second side surface of said suspension holder opposite to said first side surface," as recited in Claim 1. As previously discussed with regard to Claim 1, Masaki also does not teach or suggest this limitation.

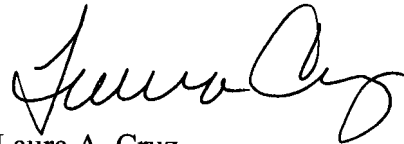
For at least the foregoing reasons, applicant respectfully submits that the Examiner has not made a *prima facie* case of obviousness because Masaki and Sugawara, even in theoretical combination, do not teach or suggest each limitation of Claim 1. Claims 5 and 9 depend from Claim 1 and, therefore, contain each and every limitation of Claim 1. As a result, a theoretical combination of Masaki and Sugawara does not teach each and every limitation of Claims 5 and 9. Accordingly, applicant respectfully submits that Claims 5 and 9 are in condition for allowance.

Conclusion

In light of the foregoing amendments and remarks, applicant asserts that the claims of the present application recite combinations of features neither taught nor suggested by the cited references. Accordingly, applicant respectfully requests an early and favorable action allowing all pending claims. The Examiner is invited to telephone the applicant's attorney at the number listed below if the Examiner has any questions.

Respectfully submitted,

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